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APPLICATION NO.	TION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,936	11	/07/2001	Olle Korsgren	KORSGREN-1	9165
1444	7590	08/25/2003			
		MARK, P.L.L.C	EXAMINER		
624 NINTH S' SUITE 300	,			JAGOE, DO	ONNA A
WASHINGTON, DC 20001-5303				ART UNIT	PAPER NUMBER
				1614	$\sim$
				DATE MAILED: 08/25/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 07-01)

	Application No.	Applicant(s)						
	09/890,936	KORSGREN ET AL.						
Office Action Summary	Examin r	Art Unit						
	Donna Jagoe	1614						
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR RETHE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication  - If the period for reply specified above is less than thirty (30) days, in If NO period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by second part of the provided pa	ON. FR 1.136(a). In no event, however, may a rent. In. In a reply within the statutory minimum of thirty eriod will apply and will expire SIX (6) MONT statute, cause the application to become ABA	ply be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133).						
1) Responsive to communication(s) filed on	<u>27 May 2003</u> .							
2a)⊠ This action is <b>FINAL</b> . 2b)□	This action is non-final.							
Since this application is in condition for al closed in accordance with the practice un Disposition of Claims								
4)⊠ Claim(s) <u>1-11</u> is/are pending in the application.								
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
6)⊠ Claim(s) <u>1-11</u> is/are rejected.								
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement.								
Application Papers								
9) The specification is objected to by the Examiner.								
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12) The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a)⊠ All b)□ Some * c)□ None of:								
1. Certified copies of the priority docum								
2. Certified copies of the priority docum	·	-						
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
14) Acknowledgment is made of a claim for dom	•							
a) The translation of the foreign language provisional application has been received.								
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
<ol> <li>Notice of References Cited (PTO-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948</li> <li>Information Disclosure Statement(s) (PTO-1449) Paper No</li> </ol>	5) Notice of In	ummary (PTO-413) Paper No(s) formal Patent Application (PTO-152)						

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### Claims 1-11 are pending in this application.

## Response to Amendments

Objection of claims 8 and 9 is no longer maintained in view of the amendments.

Rejection of claims 1-9 under 35 USC §112 2<sup>nd</sup> paragraph is no longer maintained in view of the amendments.

Rejection of claims 1-10 under 35 USC 101 is no longer maintained in view of the amendments.

### Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. Claims 1 and 10 contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Applicant has added a proviso that the isolated islets are not artificially encapsulated. This is new matter since it is not described in the instant specification.

The remaining claims are indefinite to the extent that they read on the rejected base claims.



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### Response to Arguments

Applicant's arguments filed 27 May 2003 have been fully considered but they are not persuasive. The rejection made in paper number 5 over Wagner et al. under 35 U.S.C. §102(b) is maintained and is hereby repeated.

Applicant asserts that Wagner teaches microencapsules used in transplantation surgery. The abstract for Wagner et al. teach that the immobilized material is insulin, proinsulin and/or organ cells of xenogenic or autogenic origin (islets of Langerhans, etc.) and the system contains an agent to inhibit or suppress blood agglutination, agglomeration antagonists, heparin, hirudin, marcumar and their derivatives. Wagner discloses that the islets *may* be microencapsulated. Additionally, if the cells are microencapsulated, they are first mixed with the anticoagulant material, thus anticipated the claims of the instant application.

The rejection made in paper number 5 over Lenchow et al. under 35 U.S.C. §102(b) is maintained and is hereby repeated.

Applicant asserts that while Lenchow does describe the use of human islets for transplantation, and additionally uses an immunoglobulin G1Fc, that Lenchow does not address the coagulaton process. Applicant is reminded that prevention of clotting is not claimed. Applicant has claimed a method of transplanting insulin-producing cells wherein the cells are coated with a clotting preventing agent. Since the immunoglobulin G1Fc is a clotting preventing agent, and it is administered with the islet cells, it anticipates the claims.

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The rejection made in paper number 5 over Soon-Shiong et al. under 35 U.S.C. §102(b) is maintained and is hereby repeated.

Applicant asserts that the instant invention does not involve and applicants do not claim microcapsules as disclosed by Soon-Shiong et al. However, upon examination of the instant specification, applicant describes immobilizing heparin according to a method developed by Corline Systems AB disclosed in WO 93/05793 (page 4 of the instant specification). The heparin in WO 93/05793 appears to be immobilized (conjugated) with a polymer comprising a substantially straight-chained organic homo or hetero polymer having a number of functional groups distributed along the polymer backbone chain via which groups at least about 20 molecules (see page 7 of WO 93/05793). While applicant asserts that the heparin is not in microcapsules, it appears that it is similarly coated and as such, must form micro (or macro) capsules if applicant has followed the technique of Corline Systems AB.

The rejection made in paper number 5 over Soon-Shiong et al. under 35 U.S.C. §103(a) is maintained and is hereby repeated.

Applicant asserts that Soon-Shiong does not disclose use of a clot-preventing agent to produce a drug for transplantation of insulin producing cells in the form of isolated islets to patients with insulin dependent diabetes mellitus wherein the inhibitor is an inhibitor of platelet activation. The reference discloses therapeutic applications such as the encapsulation of islets if Langerhans for the treatment of diabetes (column 3, line 65 to column 4, line 1). It would have been obvious to one of skill in the art to substitute an agent that inhibits platelet activation for an agent such as heparin that inhibits thrombin



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since the end result of both agents is to inhibit a blood clot. It is prima facie obvious to substitute equivalents, motivated by the reasonable expectation that the respective species will behave in a comparable manner or give comparable results in comparable circumstances. *In re Ruff* 118 USPQ 343; *In re Jezel* 158 USPQ 99; the express suggestion to substitute one equivalent for another need not be present to render the substitution obvious. *In re Font*, 213 USPQ 532.

Regarding the information disclosure statement referred to on page 8 of the previous office action, while it is noted that the IPER is included in the file, it is not a proper information disclosure statement as pointed out in the previous office action. If applicant wishes the documents to be considered, applicant must list the documents on a PTO form 1449 and provide a copy of each non-U.S. Patent publication.

#### Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donna Jagoe whose telephone number is (703) 306-5826. The examiner can normally be reached on Monday through Friday from 8:00 A.M. - 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marianne Seidel can be reached on (703) 308-4725. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

Donna Jagoe Patent Examiner Art Unit 1614

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